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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/773,400

02/09/2004

Ming-Cun Chen

MR3287-10

6604

4586

7590

05/04/2007

ROSENBERG, KLEIN & LEE

3458 ELLICOTT CENTER DRIVE-SUITE 101

ELLICOTT CITY, MD 21043

EXAMINER

HERNANDEZ, NELSON D

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

05/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/773,400

Applicant(s)

CHEN, MING-CUN

Examiner

Nelson D. Hernandez

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Objections

1. **Claim 1** is objected to because of the following informalities: in line 8, the word "fist" should read "first". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. **Claim 1** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. **Claim 1** recites the limitation "the adaptor" in line 13. There is insufficient antecedent basis for this limitation in the claim. For examining purposes the limitation will be read as "an adaptor".

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-3, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura et al., US Patent 6,147,701 in view of Bouvier, US Patent 5,153,623 and further in view of Cheng, US 2005/0146641 A1.**

Regarding claim 1, Tamura et al. discloses a high speed spherical monitor (See fig. 3) a housing (Fig. 3: 4) in form of a sphere (full circle as shown in fig. 3); a first driving means (Pedestal supporting unit 12 as shown in fig. 3) placed at the top of the housing and including a seat (See space inside the pedestal supporting unit 12 as shown in fig. 3), a first motor (Fig. 3: 10) placed in the seat and a turntable (Pedestal supporting unit 12 in conjunction with the supporting unit 8 act as a turntable to rotate the monitor (camera) in the housing 4) in the seat to make a radial spin by the first motor; two pivotal seats (supporting unit 8 comprises two portions to pivot the camera and housing; see fig. 3) connecting one end on the turntable (See one end of the supporting unit 8 connecting to the pedestal supporting unit 12) and another end disposed a connection to connect on the outside of the housing (See the other ends of the supporting unit 8 connecting to the outside of the housing 4 as shown in fig. 3); a second driving means (second driving means integrated with the supporting unit 8 as shown in fig. 3) placing at the side of one of pivot seat and having a second motor (Fig.

Art Unit: 2622

3: 5) for driving an adaptor (bearings in conjunction with X-axis-driving-force transmitting unit 6 which are inside the housing 4; see figs. 2 and 10), which being opposite to the pivot seat, to spin to make an axial movement; and a monitor (camera composed of optical lens unit 1, image receiving element 2 and image-signal shaping unit 3; see fig. 3) placed in the housing and having a main body (see body in fig. 1B), a lens (Fig. 3: 1) placed at the front of the main body, and the lens tightly fastened at the inside surface of the housing (See fig. 1B) (Col. 3, lines 12-67; col. 4, lines 19-65; col. 6, line 37 – col. 7, line 2; col. 7, lines 11-61).

Tamura et al. does not explicitly disclose that said high speed spherical monitor is for enhancing the brightness and clarity at night having a first cover and a second cover, and the first and second covers being semicircle, said monitor being placed in the second cover and an annular IR placed at the front of the lens.

However, Bouvier teaches a surveillance camera (See fig. 1) comprising: a housing (Fig. 1: 40) having a first cover and a second cover (42 (first) and 41 (second) as shown in fig. 1), and the first and second covers being semicircle (See fig. 1); a first motor (M1) to make a radial spin to the camera and housing; two pivotal seats (32 and 33) connecting one end on a base of a support frame (30) and another end disposed a connection to connect on the outside of the housing (See figs. 1-3); a second driving motor (M2; see fig. 3) for driving the frame, said motor transfers rotation to said housing using a belt (53) connected to a gear system (54) of the housing to spin to make an axial movement; and a monitor (Fig. 1: 10) placed in the second cover (41), a lens (12)

placed at the front of the monitor, and the lens tightly fastened at the inside surface of the second cover (Col. 1, line 66 – col. 3, line 32).

Therefore, taking the combined teaching of Tamura et al. in view of Bouvier as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tamura et al. by having a first cover and a second cover, and the first and second covers being semicircle, said monitor being placed in the second cover. The motivation to do so would have been to enable the focusing of the objective lens, to enable the passage of wires and the separation of the of the electrical supply wires of the video signal transmission wires as suggested by Bouvier (Col. 2, lines 13-27).

The combined teaching of Tamura et al. in view of Bouvier fails to teach that said high-speed spherical monitor is for enhancing the brightness and clarity at night by having an annular IR placed at the front of the lens.

However, enhancing the brightness and clarity of a monitor (camera) at night by having an annular IR placed at the front of the lens is notoriously well known in the art as taught by Cheng. Chang teaches a monitoring camera (Fig. 1) comprising a lens (Fig. 1: 14) and an annular IR placed at the front of the lens (See fig. 1) to enhance the brightness and clarity at night while providing a large visual distance due to the number of IR LEDs in the annular IR with an increased field of view allowing the camera to record images from specific locations having dark light conditions for security purposes or to document accidents (Page 1, ¶ 004-0012 and ¶0021-0025; page 2, ¶0026-0037).

Therefore, taking the combined teaching of Tamura et al. in view of Bouvier and further in view of Cheng as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tamura et al. and Bouvier by having an annular IR placed at the front of the lens. The motivation to do so would have been to provide a large visual distance due to the use of a large number of IR LEDs in the annular IR with an increased field of view allowing the camera to record images from specific locations having dark light conditions for security purposes or to document accidents as suggested by Bouvier (Page 1, ¶ 004-0012).

Regarding claim 2, the combined teaching of Tamura et al. in view of Bouvier and further in view of Cheng teaches that said turntable of the first driving means has an annular wall (see wall in Bouvier, fig. 3) which includes a first gear connecting to the first motor by a first belt to make the annular wall a radial 360 degree spin (See Tamura et al., col.6, line 52 – col.7, line 2) but fails to teach that said annular wall which includes a first gear connecting to said first motor by a first belt to spin.

However, Official notice is taken that the use of belts to transfer rotation from a motor to a gear to move a surveillance camera is notoriously well known in the art and would have been obvious to one of ordinary skill in the art to modify the teaching of Tamura et al. in view of Bouvier and further in view of Cheng where a motor is applying rotation directly to the annular wall with a system where a motor transfers rotation to the annular wall by using a belt with the motivation of reducing the cost of producing a more compact surveillance camera that would require parts design with more precision.

Regarding claim 3, the combined teaching of Tamura et al. in view of Bouvier and further in view of Cheng teaches that the motor of the second driving means further include a second gear (54 as shown by Bouvier) connecting to the adaptor, and the second motor is coupled to the second gear by a second belt (53 as shown by Bouvier) to make the housing an axial 90 degree movement (by teaching that the camera and housing rotates 360 degrees in both X and Y directions, Tamura also teaches that the housing also has a 90 degree movement; col.6, line 52 – col.7, line 2).

Regarding claim 5, the combined teaching of Tamura et al. in view of Bouvier and further in view of Cheng teaches that the front of the lens has a sealed pad (See Cheng, page 2, ¶ 0031).

Regarding claim 7, the combined teaching of Tamura et al. in view of Bouvier and further in view of Cheng teaches that the first and second covers is assembled by a screw to form the housing (See Bouvier, col. 2, lines 22-27).

7. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura et al., US Patent 6,147,701 and Bouvier, US Patent 5,153,623 in view of Cheng, US 2005/0146641 A1 and further in view of Zantos, US Patent 6,476,856 B1.

Regarding claim 4, the combined teaching of Tamura et al. in view of Bouvier and further in view of Cheng fails to teach that the monitor further comprises a fastening seat to place it.

However, Zantos teaches a surveillance camera (See fig. 5) comprising: a housing (See fig. 5) having a first cover (115) and a second cover (110), and the first and second covers being semicircle (See fig. 5) and a monitor (Fig. 5: 170) placed in a fastening seat (mounting board 430; see fig. 5) and also the second cover (110); wherein a waterproof pad (Fig. 5: 425) is placed between the first and second covers to protect the camera from weather conditions (Col. 7, lines 21-51).

Therefore, taking the combined teaching of Tamura et al. and Bouvier in view of Cheng and further in view of Zantos as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tamura et al., Bouvier and Cheng by having a fastening seat to place the monitor. The motivation to do so would have been to improve the high speed spherical monitor by maintaining the monitor (camera) secured in a place inside the housing that would provide stability to the camera.

Regarding claim 6, limitations can be found in claim 4.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 8:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone

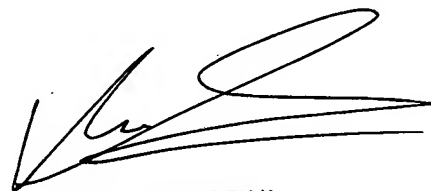
Art Unit: 2622

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nelson D. Hernandez
Examiner
Art Unit 2622

NDHH
April 26, 2007



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